UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1, 8, and 15 have been considered but are

moot in view of the new ground(s) of rejection.

2.   Applicant notes Thurston teaches, "The device independent firmware update utility

initiates the update of firmware on a plurality of different types of hardware devices and requests

device specific functions from device dependent plug-in modules. A different device dependent

plug-in module may be provided for each type of hardware device. Thus the firmware update

application separates device independent firmware update functions from device dependent

update functions." It is first noted that this quotation only states that the device dependent portion

may be provided, not that it necessarily be included. This indicates that there are times that a

device dependent is not included, and that therefore, the limitation still may be met.

3.   Applicant suggests that the inclusion of the device dependent plug in module in Fig. 3

shows the requirement of installing device dependent portions, and that the inclusion of this

element in the claims furthers the assertion that the device dependent portion is necessary. This

is not a clear showing of the requirement of adding this portion. The specification of the

reference may clearly have broader teachings than what is claimed. The existence of restriction

practice makes this clear, as the practice of restricting subject matter forbids certain subject

matter from being claimed in a certain case. Further, the forwarding of the firmware package

along a path that runs through the device dependent portion does not show what happens inside

that module. The specification still teaches that there is the ability to not add the device

dependent portion, by the use of the word "may" instead of a definitive "does" or other similar language that makes this a requirement.

4.   The arguments are not persuasive, however an alternative rejection under 35 USC 103 is presented in order to advance prosecution.

5.   Applicant also argues that because of the possibility that the package is changed, Thurston teaches away from the claimed invention. This is not what teaching away entails. "A prima facie case of obviousness can be rebutted if the applicant...can show that the art in any material respect taught away' from the claimed invention...A reference may be said to teach away when a person of ordinary skill, upon reading the reference...would be led in a direction divergent from the path that was taken by the applicant." In re Haruna, 249 F.3d 1327, 58USPQ2d 1517 (Fed. Cir. 2001). A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). The alternative presented by the reference is not teaching away from the claimed invention, but rather simply an alternative in which additional portions may or may not be added.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al.

8.   With regards to claims 1, 8, and 15, Thurston teaches packaging a communication sequence into a script by a method comprising (paragraph 29), providing said communication sequence that is a specific set of actions and action data (paragraphs 34-39); for each of said actions, creating an action header comprising an action code and one or more component specific commands (paragraphs 40-43), and creating an action payload comprising zero or more of said action data; transmitting said script to said controller (paragraphs 34-39); and communicating to said component of said system by running said script by said controller by a method comprising: providing said script to said controller (paragraphs 35-39); and for each of said action headers, executing a command corresponding to said action code (paragraphs 35-39 and 19-52), transmitting said one or more component specific commands verbatim to said component (paragraphs 35-39 and 19-52) and that the commands may be transmitted verbatim, without adding a device dependent portion (paragraph 69), and transmitting said zero or more of said action data from said action payload verbatim to said component (paragraphs 35-39 and 19-52). Thurston teaches, by silence that no translation is occurring at the time of execution.

9.   With regards to claims 2, 9, and 16, Thurston teaches said packaging of said communication is performed by a first computer system that is separate from said system controlled by said controller (paragraphs 27-29).

10.   With regards to claims 4, 11, and 18, Thurston teaches said method of packing said

communication sequence further comprises: creating a header for said script (paragraphs 40-43),

said header comprising an identifier describing the specific component for which said script is

intended (paragraphs 40-43); and said method of communicating to said component of said

system by running said script by said controller further comprises, determining a descriptor of

said component (paragraphs 40-43), comparing said descriptor of said component to said

identifier contained within said header of said script (paragraphs 40-43).

11.   With regards to claims 5, 12, and 19, Thurston teaches said method of packing said

communication sequence further comprises: creating a header for said script (paragraphs 40-44),

said header comprising a compatibility list comprising one or more applicable revisions of

firmware on said specific component for which said script is applicable (paragraphs 44-47); and

said method of communicating to said component of said system by running said script by said

controller further comprises: determining a current firmware revision of said component;

comparing said current firmware revision to said compatibility list contained within said header

of said script (paragraphs 44-47).

12.   With regards to claims 6, 13, and 20, Thurston teaches said component is a hard disk

drive (paragraph 27).

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

14.   Claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as

being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in

further view of Ex parte Wu, In re Larson, In re Kuhle, and U.S. Patent Application Publication

2001/0014093 to Yoda et al.

15.   With regards to claims 1, 8, and 15, Thurston teaches packaging a communication

sequence into a script by a method comprising (paragraph 29), providing said communication

sequence that is a specific set of actions and action data (paragraphs 34-39); for each of said

actions, creating an action header comprising an action code and one or more component specific

commands (paragraphs 40-43), and creating an action payload comprising zero or more of said

action data; transmitting said script to said controller (paragraphs 34-39); and communicating to

said component of said system by running said script by said controller by a method comprising:

providing said script to said controller (paragraphs 35-39); and for each of said action headers,

executing a command corresponding to said action code (paragraphs 35-39 and 19-52),

transmitting said one or more component specific commands to said component (paragraphs 35-

39 and 19-52) and that the commands may be transmitted verbatim, without adding a device

dependent portion (paragraph 69), and transmitting said zero or more of said action data from

said action payload verbatim to said component (paragraphs 35-39 and 19-52). Thurston

teaches, by silence that no translation is occurring at the time of execution. Thurston does not

teach that the component specific commands and action data from said action payload are always

transmitted verbatim, but rather that they may transmitted with or without device dependent

portion, and that this completed portion (with or without device dependent portion) is transmitted

without further change. However, the omission of an element and its function is obvious if the

function of the element is not desired. Ex parte Wu, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). See also In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965) (Omission of additional framework and axle which served to increase the cargo carrying capacity of prior art mobile fluid carrying unit would have been obvious if this feature was not desired.); and In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (deleting a prior art switch member and thereby eliminating its function was an obvious expedient). Yoda also teaches that it was well known in the art to transmit packets unchanged along a path (paragraph 50). It would have been obvious to one of ordinary skill in the art to eliminate the possibility of an alteration of the firmware package in Thurston in order to eliminate the function of device dependent alterations and the associated costs and complexity associated with the extra functions.

16.   With regards to claims 2, 9, and 16, Thurston teaches said packaging of said communication is performed by a first computer system that is separate from said system controlled by said controller (paragraphs 27-29).

17.   With regards to claims 4, 11, and 18, Thurston teaches said method of packing said communication sequence further comprises: creating a header for said script (paragraphs 40-43), said header comprising an identifier describing the specific component for which said script is intended (paragraphs 40-43); and said method of communicating to said component of said system by running said script by said controller further comprises, determining a descriptor of said component (paragraphs 40-43), comparing said descriptor of said component to said identifier contained within said header of said script (paragraphs 40-43).

18.   With regards to claims 5, 12, and 19, Thurston teaches said method of packing said communication sequence further comprises: creating a header for said script (paragraphs 40-44),

said header comprising a compatibility list comprising one or more applicable revisions of

firmware on said specific component for which said script is applicable (paragraphs 44-47); and

said method of communicating to said component of said system by running said script by said

controller further comprises: determining a current firmware revision of said component;

comparing said current firmware revision to said compatibility list contained within said header

of said script (paragraphs 44-47).

19.   With regards to claims 6, 13, and 20, Thurston teaches said component is a hard disk

drive (paragraph 27).

20.   Claims 3, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication 2003/0217358 to Thurston et al. in further view of U.S. Patent

6,789,157 to Lilja et al.

21.   With regards to claims 3, 10, and 17, Thurston teaches said method of packing said

communication sequence further comprises: creating a header for said script (paragraphs 40-43),

said header comprising a checksum (paragraph 42); and said method of communicating to said

component further comprises: reading said header of said script (paragraph 53), computing a

computed checksum of said script (paragraph 53), comparing said computed checksum to said

checksum contained within said header of said script (paragraph 53). Thurston fails to teach a

CRC. Lilja teaches that using a firmware update with a CRC instead of a checksum. It would

have been obvious to one of ordinary skill in the art at the time of invention to substitute the use

of CRC of Lilja for the checksum of Thurston (and Wu, Larson, Kuhle, and to Yoda et al. in the

alternative) in order to more completely check whether the firmware has been corrupted during

transmission.

22.   Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication 2003/0217358 to Thurston et al. in further view of U.S. Patent

Application Publication 2002/0166027 to Shirasawa et al.

23.   With regards to claims 7, 14, and 21, Thurston fails to teach the firmware update script

package being used to update a RAID controller. Shirasawa teaches said controller is a RAID

controller (paragraphs 8 and 9). It would have been obvious to one of ordinary skill in the art at

the time of invention to use the firmware update script package of Thurston (and Wu, Larson,

Kuhle, and to Yoda et al. in the alternative) for updating RAID firmware as taught by Shirasawa

in order to homogenize the ability of each of the hard disk units to increase process speed and

decrease error occurrence.

Conclusion

24.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M, T, Th, and F, 9-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

KIM HUYNH
SUPERVISORY PATENT EXAMINER

6/7/07